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DATE: Monday, February 26, 2007

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☐	L13	(clean$4) with (dopant or dopt$4)	801
☐	L12	l1 same l11	39
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☐	L10	L8 and (l1)	2
☐	L9	L8 and (l1 with rins$4)	1
☐	L8	dopant paste	15
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☐	L4	L1 with (dopant or dopt$4)	204
☐	L3	L1 same (dopant or dopt$4) same barrier	6
☐	L2	L1 and (dopant or dopt$4) and barrier	2393
☐	L1	acetone or ketone or ethyleneglycol or dioxane	605110

END OF SEARCH HISTORY

L14: Entry 10 of 12 File: USPT Mar 20, 1979

DOCUMENT-IDENTIFIER: US 4144634 A
TITLE: Fabrication of gallium arsenide MOS devices

Detailed Description Text (16):
In a specific embodiment of the above-described invention, the various oxide layers were grown using the plasma apparatus described above. An epitaxially grown GaAs sample 1/4 .times. 1/2 inch with an effective dopant concentration of approximately 10.sup.13 /cm.sup.3 was cleaned with trichlorethylene, acetone, and alcohol. A 100 Angstrom thick film of aluminum was then evaporated on the gallium arsenide substrate and subsequent to this evaporation the surface was cleaned again as above. The sample was then placed in a boron nitride holder. Any insulating holder that does not contaminate the substrate during the oxidation, as a result of sputtering, may be used. The sample and holder were placed in a plasma growth apparatus as described in the body of the specification and the apparatus was operated under the conditions described above. During the growth the sample was biased positively with respect to ground at a voltage which resulted in a current of between 10 and 100 milliamperes. The growth can take anywhere from 10 to 200 minutes and in this particular sample the growth proceeded for 60 minutes. Subsequent to the oxidation the sample may be annealed in hydrogen at approximately one atmosphere at a temperature of between 400.degree. and 600.degree. C. for between 10 and 100 minutes. This particular sample was annealed at 550.degree. C. for 30 minutes. Metal dots of aluminum or gold were then evaporated on the sample and MOS data were taken according to techniques well known in the art. The polarity independent breakdown voltage for this device was found to be greater than 4 .times. 10.sup.6 volts/cm. The asymptotic slope in both the inversion and accumulation regions of the CV curve had an absolute value less than 0.02pF/V. The surface state density was less than 1 .times. 10.sup.11 cm.sup.2.

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L12: Entry 13 of 39 File: USPT Dec 3, 2002

DOCUMENT-IDENTIFIER: US 6489616 B2
TITLE: Doped, organic carbon-containing sensor for infrared detection and a process for the preparation thereof

Detailed Description Text (54):
After the implantation process is complete, typically most or essentially all of the target dopant layer is either diffused into the polymer layer or sputtered off the polymer layer surface. Any dopant which remains may be removed by means common in the art. For example, because the dopant is below the surface of the sensor (e.g., typically about 25 angstroms, 50 angstroms or more), the surface can be cleaned with a solvent (e.g., an acetone solution) without disturbing the amorphous layer of the sensor.

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L7: Entry 8 of 8 File: USPT Mar 20, 1979

DOCUMENT-IDENTIFIER: US 4144634 A
TITLE: Fabrication of gallium arsenide MOS devices

Detailed Description Text (16):
In a specific embodiment of the above-described invention, the various oxide layers were grown using the plasma apparatus described above. An epitaxially grown GaAs sample 1/4 .times. 1/2 inch with an effective dopant concentration of approximately 10.sup.13 /cm.sup.3 was cleaned with trichlorethylene, acetone, and alcohol. A 100 Angstrom thick film of aluminum was then evaporated on the gallium arsenide substrate and subsequent to this evaporation the surface was cleaned again as above. The sample was then placed in a boron nitride holder. Any insulating holder that does not contaminate the substrate during the oxidation, as a result of sputtering, may be used. The sample and holder were placed in a plasma growth apparatus as described in the body of the specification and the apparatus was operated under the conditions described above. During the growth the sample was biased positively with respect to ground at a voltage which resulted in a current of between 10 and 100 milliamperes. The growth can take anywhere from 10 to 200 minutes and in this particular sample the growth proceeded for 60 minutes. Subsequent to the oxidation the sample may be annealed in hydrogen at approximately one atmosphere at a temperature of between 400.degree. and 600.degree. C. for between 10 and 100 minutes. This particular sample was annealed at 550.degree. C. for 30 minutes. Metal dots of aluminum or gold were then evaporated on the sample and MOS data were taken according to techniques well known in the art. The polarity independent breakdown voltage for this device was found to be greater than 4 .times. 10.sup.6 volts/cm. The asymptotic slope in both the inversion and accumulation regions of the CV curve had an absolute value less than 0.02pF/V. The surface state density was less than 1 .times. 10.sup.11 cm.sup.2.

Current US Original Classification (1):
438/590

Current US Cross Reference Classification (7):
438/591

Current US Cross Reference Classification (8):
438/779

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